

Puerto Rico Sea Grant College Program 2012 NSGO Review

Nikola Garber

PR SG Management

- Management staff (Name, position, FTE)
 - Director, Ruperto Chaparro (1.0 FTE)
 - Associate Director and director Marine Outreach Program, Manuel Valdes (1.0 FTE)
 - Communication Specialist, Cristina Olán (1.0 FTE)
 - Research Coordinator, Kurt Grove (1.0 FTE)
 - Office Administrator (Fiscal Officer), Yulissa Garcia (1.0 FTE)
- Small Program

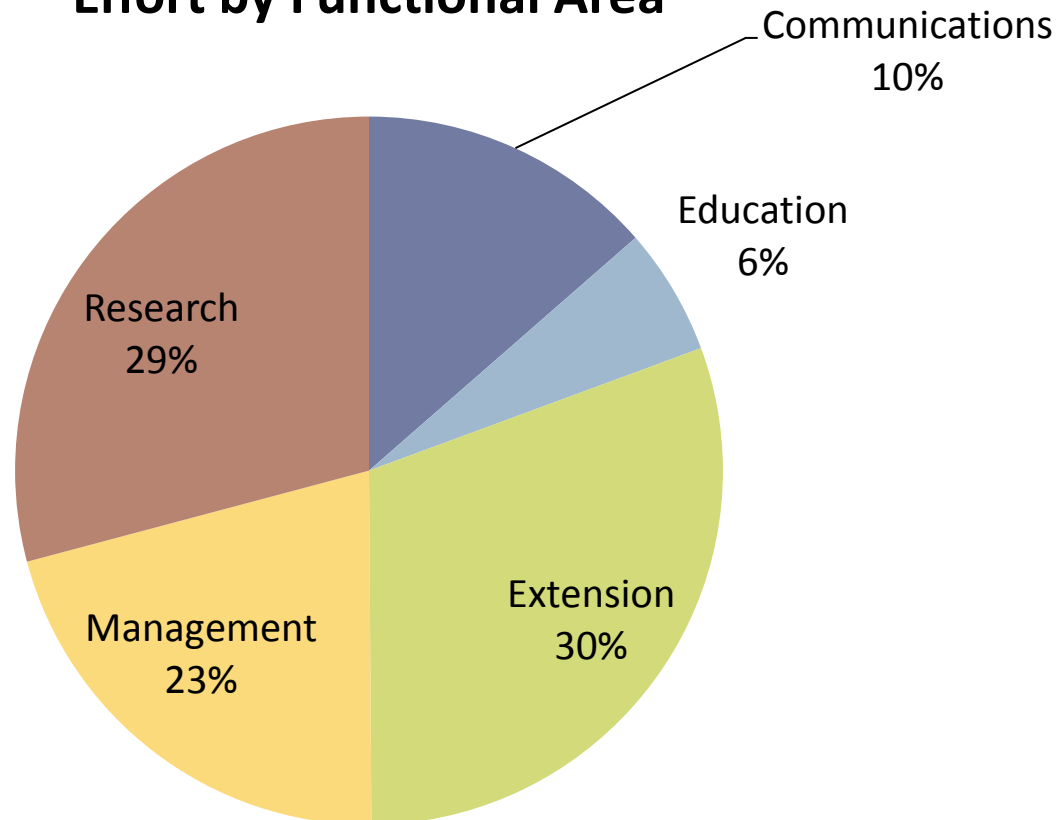
PR SG Management

- Total FTEs on staff

| Functional Area | # of individuals | # of FTEs supported by SG | # of FTEs supported by match/leverage |
|-----------------|------------------|---------------------------|---------------------------------------|
| Mgt/Admin | 6 | 2.67 | 2.83 |
| Comm. | 11 | 1 | 6.45 |
| Ext. | 10 | 3.34 | 4.41 |
| Education | 6 | 2.34 | 1 |
| Research | 58 | 3.6 | 1.45 |

PR SG 2010 Core Budget (Fed + Match) towards each Functional Area

Effort by Functional Area

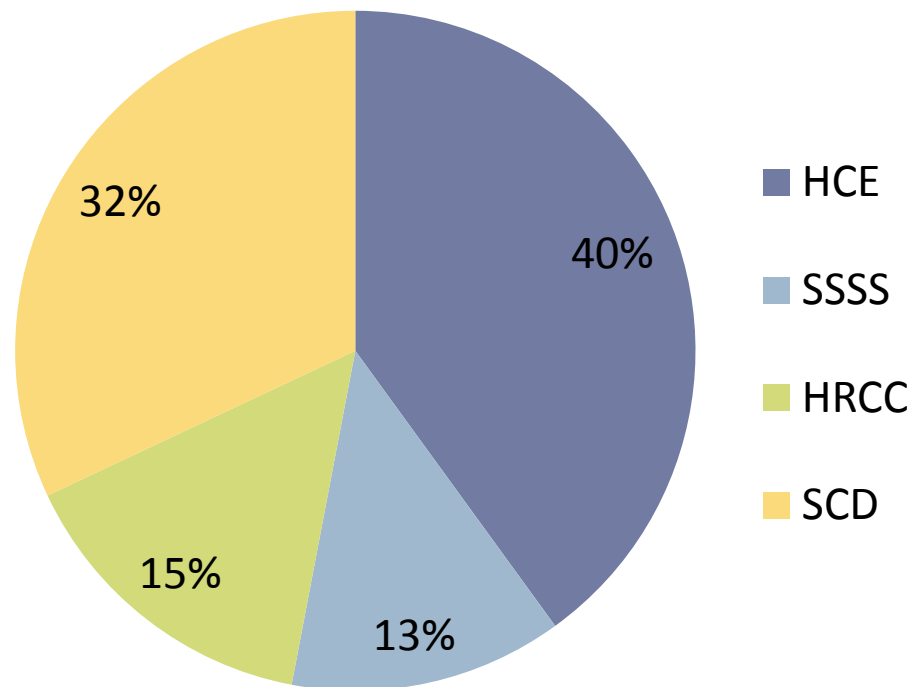


Extension includes both PR and USVI extension.
Management includes Program Development funds.

PR SG 2010 Budget towards each Focus Area

(Fed + Match + Pass-Through + Managed Leveraged Funds)

Effort by Focus Area



Significant PR SG Changes (since Jan. 2011)

- Publication database is in full use. General public can now easily search for publication data across the Caribbean.

PR SG Program RFP Process

- Request for proposals
 - Thematic areas included those identified in 2010-2014 strategic plan and preliminary findings from focus groups conducted as part of Caribbean Research Assessment project.
- Evaluation of pre-proposals
- Invitation to submit full proposals
- Individuals reviews of full proposals
- Technical review panel convene via teleconference
- Selection for funding of full proposals

RFP Process for 2012-2013 Projects – Research Metrics

| Core Proposals | # of Proposals | # of institutions | # of proposals from home institution |
|--------------------------|----------------|-------------------|--------------------------------------|
| Pre-proposals submitted | 32 | 30 | 12 |
| Full proposals submitted | 14 | 13 | 8 |
| Proposals Funded | 4 | 4 | 2 |

PR SG Contribution to National Performance Measures and Metrics

| Focus Area | Metric | Actual |
|------------|---|--------|
| SSSS | Number of fishers who adopt and implement responsible harvesting techniques and practices. | 21 |
| | Volunteer Hours | 2500 |
| SCD | Number of coastal communities who have adopted/implement sustainable - economic and environmental - development practices and policies as a result of Sea Grant activities. | 7 |
| HCE | Number of coastal communities who have restored degraded ecosystems as a result of Sea Grant activities. | 4 |

PR SG Impacts

- 3 coastal communities, San José, El Seco and El Maní, located in pockets of the remnant of one of the largest mangrove forests and coastal marshlands in Puerto Rico, participated in this project.
- Participants provided information on knowledge and practices regarding coastal hazards and response measures.
- Found: actual evacuation routes are not the best, due to their proximity to the sea and riverbanks. The best routes and scenarios for evacuation were discussed and located.
- Future plans: Education programs and outreach from local and state agencies needed to develop together future plans on relocation and evacuation routes, based on their different needs and the socioeconomic and cultural characteristics of their respective communities.
- Focus Area: HRCC
 - Goals: Widespread understanding of the risks associated with living, working, and doing business along the nation's coasts; Community capacity to prepare for and respond to hazardous events

PR SG Impacts

- Desecheo Island Marine Reserve, Management Plan
 - Sea Grant and the CIEL team collaborated with stakeholders in the Northwest Coast to develop a management plan for the conservation of a marine reserve in an offshore island in the Mona Channel.
 - Participatory process, engaging stakeholders in stewardship of the resources.
 - Fishers, recreational business owners, the Commonwealth's Tourism Company, UPRM, and the Department of Natural and Environmental Resources were represented in the Steering Committee.
 - Sea Grant and CIEL will participate in facilitation of the management board that will implement the plan.
- Focus Area: HCE
 - Goals: Widespread use of ecosystem-based approaches to managing land, water and living resources in coastal areas; Sound scientific information to support ecosystem-based approaches to managing the coastal environment of the archipelago of Puerto Rico and the US Virgin Islands

PR SG Impacts

- Management Board for the Tres Palmas Marine Reserve (TPMR) in Rincón, Northwest Puerto Rico.
 - Sea Grant and CIEL team are facilitating process of the implementation of the management plan, through an officially constituted board.
- Focus Area: HCE
 - Goal: Widespread use of ecosystem-based approaches to managing land, water and living resources in coastal areas

PR SG Impacts

- Application and Implementation of a Conservation Action Planning Methodology (CAP) at the Boquerón Wildlife Refuge.
 - Sea Grant & the CIEL team collaborated with the DNER in the development of a stakeholder consultation process for the conservation and restoration of the wetlands of the wildlife refuge located in the Southwest coast of the Island.
 - Information on best management practices, conservation targets, threats, as well as research, restoration and conservation needs was gathered from waterfowl hunters, local communities, visitors, recreational business owners, resource managers, and scientists.
 - The information used in the preparation of a management plan for the refuge, and portions of the report were successfully used in the preparation of a proposal for the restoration of the area.
 - The project also shows Sea Grant collaboration with the DNER, USFWS, and stakeholders, to build a process of stewardship for the refuge.
- Focus Area: HCE
 - Goal: Restored function and productivity of degraded ecosystems

PR SG Impacts

- As part of the efforts and collaboration with Puerto Rico EPA Stormwater Program in previous years, capacity building was provided to the 78 municipalities of Puerto Rico. Up to date 70 municipalities of Puerto Rico have active permits for stormwater management.
- Focus Area: SCD
 - Goal: Coastal communities that make efficient use of land, energy and water resources and protect the resources needed to sustain coastal ecosystems and the quality of life
- Focus Area: HCE
 - Goal: Widespread use of ecosystem-based approaches to managing land, water and living resources in coastal areas

PR SG 2010 Research Accomplishments

- Research demonstrated for the first time that large, conspicuous sea anemones on reefs may be efficiently tracked using precise tagging and mapping techniques and frequent census methods.
- Demographic data provided, improved the ability of resource managers to forecast recovery rates of these important reef organisms following disturbances.
- Several conservation tools (to be used by managers) and environmental educational activities to prevent overharvesting were developed.

Background:

- Anemone hosts may serve as base stations for fish cleaning activity on Caribbean coral reefs and their loss can lead to cascade effects across multiple trophic levels on the reef.
- Giant sea anemones & crustacean associates are a preferred invertebrates for ornamental aquarium trade in the Caribbean making information on their population dynamics essential to support a sustainable fishery.
- Researcher: Chadwick, N.

PR SG 2010 Research Accomplishments

- Sea Grant contributes to rapid detection of fecal contamination in coastal water and to the safety of our beaches.
- Primers for *B. Adolescentis* were used to detect fecal contamination in less than two hours.

Background:

- Research developed culture independent methods to detect, identify and quantify the abundance of *B. adolescentis*, a human fecal indicator bacteria in marine environments of Puerto Rico, using a field sample and PCR.
- Able to provide confirmation & quantification of fecal contamination in hours instead of days.
- Help avoid unnecessary advisories & closings, while protecting humans and fisheries.
- In early February, the PR SG director and researcher meet with officials of Puerto Rico's Environmental Quality Board to present and discuss the possibility of testing this new with standard protocols of enterococci and *E. coli*.
- Researcher: Bachoon, D.

Sources (unless otherwise noted)

- Planning, Implementation, and Evaluation Resources (PIER)
<https://pier.seagrant.noaa.gov>
- Personal Communication with Program
- Site Visit report
- Puerto Rico Sea Grant omnibus proposal